

Appln. No. 09/836,685
Amendment dated August 16, 2004
Reply to Office Action of July 16, 2004

The following listing of claims sets forth the text and status of claims in the application:

Listing of Claims:

Claim 1 (currently amended) Method for treating optical signals from a source thereof, which comprises the steps of:

- (a) providing a ~~movable~~ rotatable diffractive optical element (~~MDOE~~ RDOE) having a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are superimposed, each being angularly offset with respect to each other;
- (b) directing a source of input optical signal(s), each of said input signal(s) being associated with a given wavelength, onto said ~~MDOE~~ RDOE to generate output signal(s);
- (c) supplying one or more output station(s); and
- (d) ~~moving~~ rotating said ~~MDOE~~ RDOE to distribute any said output optical signal(s) to any said output station(s).

Claim 2 (cancelled)

Claim 3 (currently amended) The method of claim 1, wherein said ~~MDOE~~ RDOE is provided as a magnet having said holographic diffraction grating attached thereto, and being magnetically coupled to a coil energizable for ~~movement~~ rotation of said magnet and said diffraction grating.

Claims 4-16 (cancelled)

Claim 17 (currently amended) A system for treating optical signals from a source thereof, which comprises:

a source, a ~~movable~~ rotatable diffractive optical element (~~MDOE~~ RDOE), and output station(s), wherein

- (a) said source carries input optical signal(s), each of said signal(s) being associated with a particular wavelength;
- (b) said ~~movable~~ rotatable diffractive optical element (~~MDOE~~ RDOE) has a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are

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superimposed, each being angularly offset with respect to each other, said ~~MDOE~~ RDOE being positioned to intercept said input optical signal(s) for generating output optical signal(s) and distributing any said output optical signal(s), to any said output optical station(s) and;

- (c) said output station(s) being positioned to receive said output optical signal(s) from said ~~MDOE~~ RDOE.

Claims 18-31 (cancelled)

Claim 32 (currently amended) In a method for treating optical signals wherein optical signals provided by fiber optic cable(s) or laser diode(s) as input optical signals are distributed among output stations as output optical signals, each of said output stations comprising optical connector(s) positioned to receive said output optical signals, said optical connectors being selectively combinable to permit any combination of said output optical signals, the improvement which comprises the steps of:

- (a) providing a ~~movable~~ rotatable diffractive optical element (~~MDOE~~ RDOE) having a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are superimposed, each being angularly offset with respect to each other;
- (b) directing said source of input optical signals onto said ~~MDOE~~ RDOE to generate output signals, each of said input signals being associated with a given wavelength; and
- (c) ~~moving~~ rotating said ~~MDOE~~ RDOE to distribute any said output optical signals to any said output stations.

Claims 33-39 (cancelled)